Request ___ Jon Delord

ACCESS DB # UZZGU

PLEASE PRINT CLEARLY

FOR OFFICIAL USE ONLY

Scientific and Technical Information Center

SEARCH REQUEST FORM

P 1	SEARCH REQ	
Requester's Full Name:	cha Qo	Examiner # : 74141 Date: 8/11/05
Art Unit: 1616 Phone	Number 2- OG	Serial Numbers ()
Location (Bldg/Room#): 4A45	(Mailbox #): 4 C.70 F	Serial Number: 10/65 326 Results Format Preferred (orcip): PAPER) DISK
********	**********	**************************************
To ensure an efficient and quality search,	please attach a copy of the cov	ver sheet, claims, and abstract or fill out the following:
Title of Invention: New V2	t D derivale	erles
Inventors (please provide full names):	Kirzch	et of
Earliest Priority Date: 4/30/1	1796 Di	v. of US Part 6,642,218
Search Topic:		7 7 7 8
Please provide a detailed statement of the sec elected species or structures, keywords, syno		cifically as possible the subject matter to be searched. Include the numbers, and combine with the concept or utility of the invention.
y same and may make a special me	aning. Give examples or relevi	ant citations, authors, etc., if known.
appropriate serial number.		arent, child, divisional, or issued patent numbers) along with the
	-	(t)) (abd (c0)
Please Sen	reh for V	vacanta de conques car
Subs. at C-	25 by a	Carbonyelie or heterecy
	h man or	I making and uses.
3/05; Then	process of	\mathcal{J}
		•
		· ·
.2		
Please Son	alt sel	had Steet
1 lease 300		
•	•	
	•	•
Thank you	•	
. :		,
		$\sum_{i=1}^{n} \left(\frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{1}{2} \right)$
		Service August 1985

STAFF USE ONLY	**************************************	***********
Searcher:	NA Sequence (#)	Vendors and cost where applicable
Searcher Phone #: 12604	AA Sequence (#)	Questel/Orbit Lexis/Nexis
Searcher Location:	Structure (#)	Westlaw WWW/Internet
Date Searcher Picked Up: 8 171 05	Bibliographic	In-house sequence systems
Date Completed:	Litigation	CommercialOligomerScore/Length
Searcher Prep & Review Time:	Fulltext	
Online Time: 5100	Other .	8

=> fil reg
FILE 'REGISTRY' ENTERED AT 07:39:24 ON 17 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: . 16 AUG 2005 HIGHEST RN 860495-66-5 DICTIONARY FILE UPDATES: 16 AUG 2005 HIGHEST RN 860495-66-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

* The CA roles and document type information have been removed from *

* the IDE default display format and the ED field has been added, *

* effective March 20, 2005. A new display format, IDERL, is now *

* available and contains the CA role and document type information. *

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sta que 126 L16 STR

NODE ATTRIBUTES:

NSPEC IS RC AT 19 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

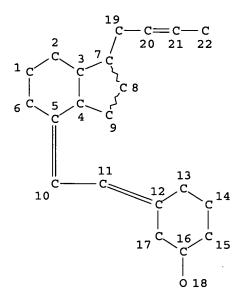
GRAPH ATTRIBUTES: RSPEC 12 5

NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE

L17 8760 SEA FILE=REGISTRY SSS FUL L16

L18 STR



NODE ATTRIBUTES:

NSPEC IS RC AT 19 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 12 5

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L20 2256 SEA FILE=REGISTRY SUB=L17 SSS FUL L18

L24 STR

370 ANSWERS

NODE ATTRIBUTES:

AT 19 NSPEC IS RC DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 7 12

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

L26 370 SEA FILE=REGISTRY SUB=L20 SSS FUL L24

100.0% PROCESSED 2256 ITERATIONS

SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 06:22:53 ON 17 AUG 2005) SET COST OFF

FILE 'HCAPLUS' ENTERED AT 06:23:03 ON 17 AUG 2005

L1 1 S (US20050080058 OR US6600058 OR US6613920 OR US6642218 OR US20

E STEINMEYER A/AU L2

50 S E3, E4

E KIRSCH G/AU

L3 152 S E3-E5, E11

E NEEF G/AU

L4 186 S E3, E5-E7

E SCHWARZ K/AU

L5 443 S E3-E14, E42, E43

E THIEROFF E/AU

L6 27 S E4-E7

E ECKERDT/AU

E EKERDT/AU

L7 6 S E9

```
E WIESINGER H/AU
L8
             64 S E3-E6,E10
                E HABEREY M/AU
L9
             54 S E3, E4
                E FAHNRICH M/AU
              7 S E3,E4
L10
                E FAEHNRICH M/AU
L11
              7 S E3,E4
L12
          13977 S SCHERING?/PA,CS
                SEL RN L1
     FILE 'REGISTRY' ENTERED AT 06:27:16 ON 17 AUG 2005
L13
            436 S E1-E436
                ACT QAZI962/A
L14
                STR
L15
           8455 SEA FILE=REGISTRY SSS FUL L14
                ------
L16
                STR L14
L17
           8760 S L16 FUL
                SAV L17 QAZI658/A
L18
                STR L16
L19
             50 S L18 SAM SUB=L17
L20
           2256 S L18 FUL SUB=L17
                SAV L20 QAZI648A/A
                DEL QAZI648A/A
                SAV L20 QAZI658A/A
L21
                STR L18
L22
              8 S L21 SAM SUB=L20
L23
            370 S L21 FUL SUB=L20
                SAV L23 QAZI658B/A
L24
                STR L21
L25
              8 S L24 SAM SUB=L20
L26
            370 S L24 FUL SUB=L20
                SAV L26 QAZI658C/A
L27
            328 S L13 AND L20
L28
             10 S L27 NOT L26
L29
              2 S L28 AND C3/ES
L30
            372 S L23, L26, L29
                SAV L30 QAZI659D/A
     FILE 'HCAOLD' ENTERED AT 07:24:16 ON 17 AUG 2005
L31
              0 S L30
     FILE 'HCAPLUS' ENTERED AT 07:24:20 ON 17 AUG 2005
L32
              9 S L30
L33
              7 S L32 AND L1-L12
L34
              3 S L32 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L35
              3 S L33 AND L34
     FILE 'USPATFULL' ENTERED AT 07:25:47 ON 17 AUG 2005
L36
              8 S L30
L37
              5 S L36 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L38
              5 S L36 AND SCHERING?/PA
L39
              7 S L36 AND (STEINMEYER ? OR KIRSCH ? OR NEEF ? OR SCHWARZ ? OR T
L40
              5 S L37 AND L38, L39
     FILE 'REGISTRY' ENTERED AT 07:33:06 ON 17 AUG 2005
```

FILE 'HCAPLUS' ENTERED AT 07:33:23 ON 17 AUG 2005

<<<

<<<

<<<

```
FILE 'USPATFULL' ENTERED AT 07:33:54 ON 17 AUG 2005
     FILE 'REGISTRY' ENTERED AT 07:34:13 ON 17 AUG 2005
            370 S L30 AND NR>=5
L41
L42
              2 S L30 NOT L41
     FILE 'HCAPLUS' ENTERED AT 07:36:14 ON 17 AUG 2005
L43
              7 S L41
L44
              5 S L1-L12 AND L43
              1 S L43 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L45
L46
              1 S L44 AND L45
L47
              6 S L43 NOT L46
     FILE 'USPATFULL' ENTERED AT 07:37:55 ON 17 AUG 2005
L48
              7 S L41
L49
              4 S L48 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L50
              3 S L49 AND SCHERING?/PA
L51
              4 S L49 AND (STEINMEYER ? OR KIRSCH ? OR NEEF ? OR SCHWARZ ? OR T
L52
              4 S L49-L51
     FILE 'REGISTRY' ENTERED AT 07:39:24 ON 17 AUG 2005
=> fil uspatful
FILE 'USPATFULL' ENTERED AT 07:39:42 ON 17 AUG 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 16 Aug 2005 (20050816/PD)
FILE LAST UPDATED: 17 Aug 2005 (20050817/ED)
HIGHEST GRANTED PATENT NUMBER: US6931661
HIGHEST APPLICATION PUBLICATION NUMBER: US2005177917
CA INDEXING IS CURRENT THROUGH 17 Aug 2005 (20050817/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 16 Aug 2005 (20050816/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2005
>>> USPAT2 is now available. USPATFULL contains full text of the
                                                                       <<<
>>> original, i.e., the earliest published granted patents or
                                                                       <<<
>>> applications. USPAT2 contains full text of the latest US
                                                                       <<<
>>> publications, starting in 2001, for the inventions covered in
                                                                       <<<
>>> USPATFULL. A USPATFULL record contains not only the original
                                                                       <<<
>>> published document but also a list of any subsequent
                                                                       <<<
>>> publications. The publication number, patent kind code, and
                                                                       <<<
>>> publication date for all the US publications for an invention
                                                                       <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL
                                                                       <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.
                                                                       <<<
>>> USPATFULL and USPAT2 can be accessed and searched together
                                                                       <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to
                                                                       <<<
>>> enter this cluster.
                                                                       <<<
>>>
                                                                       <<<
```

This file contains CAS Registry Numbers for easy and accurate substance identification.

the earliest to the latest publication.

>>> Use USPATALL when searching terms such as patent assignees,

>>> classifications, or claims, that may potentially change from

=> d 152 bib abs hitrn fhitstr tot

```
L52 ANSWER 1 OF 4 USPATFULL on STN
AN
       2005:93380 USPATFULL
TI
       New vitamin D derivatives with carbo-or heterocyclic substituents at
       C-25, a process for their production, intermediate products and their
       use for producing medicaments
       Steinmeyer, Andreas, Berlin, GERMANY, FEDERAL REPUBLIC OF
IN
         Kirsch, Gerald, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Neef, Gunter, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Schwarz, Katica, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Thieroff-Ekerdt, Ruth, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Wiesinger, Herbert, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Haberey, Martin, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Fahnrich, Marianne, Berlin, GERMANY, FEDERAL REPUBLIC OF
PA
       Schering Aktiengesellschaft Patents, Berlin, GERMANY, FEDERAL
       REPUBLIC OF (non-U.S. corporation)
PΙ
       US 2005080058
                               20050414
                          AΊ
ΑI
       US 2003-658326
                          Αl
                               20030910 (10)
       Division of Ser. No. US 1998-180018, filed on 11 Dec 1998, GRANTED, Pat.
RLI
       No. US 6642218
PRAI
       DE 1996-19619036
                           19960430
                                                                     <--
DT
       Utility
FS
       APPLICATION
       MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE
LREP
       1400, ARLINGTON, VA, 22201, US
CLMN
       Number of Claims: 25
       Exemplary Claim: 1-10
ECL
DRWN
       No Drawings
LN.CNT 3068
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Compounds of Formula I,
AB
                                  ##STR1##
                                             wherein Y.sub.1, Y.sub.2,
       R.sub.1-R.sub.6, Q and Z are as defined herein, are vitamin D
       derivatives. These compounds are useful for, e.g., the treatment
       hyperprolifierative diseases of the skin, tumor diseases and
       precancerous stages, auto-immune diseases, rejection reactions in the
       case of autologous, allogenic or xenogenic transplants, AIDS, atopic
       skin conditions, secondary hyperparathyroidism, renal osteodystrophia,
       senile and postmenopausal osteoporosis, diabetes mellitus type II,
       degenerative diseases of the peripheral and central nervous system,
       hypercalcemias, granulomatous diseases, paraneoplastic hypercalcemias,
       hypercalcemias in hyperparathyroidism, hirsutism, ateriosclerosis,
       and/or inflammatory diseases.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     198758-90-6P 198758-92-8P 198758-94-0P
      198758-96-2P 198759-04-5P 198759-06-7P
      198759-07-8P 198759-08-9P 198759-14-7P
      198759-29-4P 198759-34-1P 198759-39-6P
      198759-48-7P 198759-49-8P 198759-50-1P
      198759-53-4P 198759-57-8P 198759-58-9P
      198759-60-3P 198759-61-4P 198759-70-5P
      198759-71-6P 198759-81-8P 198759-83-0P
      198759-85-2P 198759-87-4P 198759-89-6P
      198759-91-0P 198759-96-5P 198759-97-6P
      198759-98-7P 198759-99-8P 198760-01-9P
      198760-02-0P 198760-03-1P 198760-04-2P
```

198760-06-4P 198760-10-0P 198760-14-4P 198760-18-8P 198760-20-2P 198760-21-3P 198760-22-4P 198760-23-5P 198760-24-6P 198760-26-8P 198760-27-9P 198760-28-0P

```
198760-29-1P 198760-30-4P 198760-31-5P
198760-32-6P 198760-33-7P 198760-35-9P
198760-36-0P 198760-37-1P 198760-38-2P
198760-39-3P 198760-40-6P 198760-41-7P
198760-42-8P 198760-43-9P 198760-44-0P
198760-45-1P 198760-47-3P 198760-48-4P
198760-49-5P 198760-50-8P 198760-51-9P
198760-52-0P 198760-53-1P 198760-54-2P
198760-55-3P 198760-56-4P 198760-57-5P
198760-59-7P 198760-61-1P 198760-64-4P
198760-66-6P 198760-67-7P 198760-68-8P
198760-69-9P 198760-70-2P 198760-71-3P
198760-72-4P 198760-73-5P 198760-74-6P
198760-76-8P 198760-78-0P 198760-80-4P
198760-81-5P 198760-83-7P 198760-85-9P
198760-86-0P 198760-88-2P 198760-90-6P
198760-92-8P 198760-94-0P 198760-96-2P
198760-98-4P 198760-99-5P 198761-00-1P
198761-01-2P 198761-02-3P 198761-03-4P
198761-04-5P 198761-05-6P 198761-06-7P
198761-07-8P 198761-08-9P 198761-09-0P
198761-10-3P 198761-11-4P 198761-12-5P
198761-13-6P 198761-14-7P 198761-15-8P
198761-16-9P 198761-17-0P 198761-18-1P
198761-19-2P 198761-20-5P 198761-21-6P
198761-22-7P 198761-23-8P 198761-24-9P
198761-25-0P 198761-26-1P 198761-27-2P
198761-28-3P 198761-29-4P 198761-30-7P
198761-31-8P 198761-32-9P 198761-33-0P
198761-34-1P 198761-35-2P 198761-36-3P
198761-37-4P 198761-39-6P 198761-41-0P
198761-43-2P 198761-45-4P 198761-46-5P
198761-47-6P 198761-48-7P 198761-50-1P
198761-52-3P 198761-54-5P 198761-55-6P
198761-56-7P 198761-57-8P 198761-58-9P
198761-59-0P 198761-60-3P 198761-61-4P
198761-62-5P 198761-63-6P 198761-64-7P
198761-65-8P 198761-66-9P 198761-67-0P
198761-68-1P 198761-69-2P 198761-70-5P
198761-71-6P 198761-72-7P 198761-73-8P
198761-74-9P 198761-75-0P 198761-76-1P
198761-77-2P 198761-78-3P 198761-79-4P
198761-80-7P 198761-81-8P 198761-82-9P
198761-83-0P 198761-84-1P 198761-85-2P
198761-86-3P 198761-87-4P 198761-88-5P
198761-89-6P 198761-90-9P 198761-91-0P
198761-92-1P 198761-93-2P 198761-94-3P
198761-95-4P 198761-96-5P 198761-97-6P
198761-98-7P 198761-99-8P 198762-00-4P
198762-01-5P 198762-02-6P 198762-03-7P
198762-04-8P 198762-05-9P 198762-06-0P
198762-07-1P 198762-08-2P 198762-09-3P
198762-10-6P 198762-11-7P 198762-12-8P
198762-13-9P 198762-14-0P 198762-15-1P
198762-16-2P 198762-18-4P 198762-20-8P
198762-22-0P 198762-24-2P 198762-26-4P
198762-27-5P 198762-29-7P 198762-34-4P
198762-36-6P 198762-39-9P 198762-40-2P
198762-42-4P 198762-44-6P 198762-46-8P
198762-48-0P 198762-50-4P 198762-52-6P
```

```
198762-53-7P 198762-55-9P 198762-57-1P
      198762-59-3P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
TT
     198762-61-7P 198762-62-8P 198762-64-0P
      198762-66-2P 198762-67-3P 198762-69-5P
      198762-71-9P 198762-73-1P 198762-75-3P
      198762-76-4P 198762-78-6P 198762-79-7P
      198762-80-0P 198762-82-2P 198762-84-4P
      198762-86-6P 198762-88-8P 198762-90-2P
      198762-93-5P 198762-96-8P 198762-99-1P
      198763-03-0P 198763-06-3P 198763-09-6P
      198763-10-9P 198763-12-1P 198763-14-3P
      198763-16-5P 198763-18-7P 198763-20-1P
      198763-22-3P 198763-23-4P 198763-24-5P
      198763-25-6P 198763-27-8P 198763-29-0P
      198763-31-4P 198763-32-5P 198763-33-6P
      198763-35-8P 198763-37-0P 198763-39-2P
      198763-41-6P 198763-42-7P 198763-43-8P
      198763-44-9P 198763-46-1P 198763-48-3P
      198763-50-7P 198763-52-9P 198763-54-1P
      198763-56-3P 198763-58-5P 198763-60-9P
      198768-25-1P 198768-26-2P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
IT
     198758-88-2P 198759-02-3P 198759-12-5P
      198759-13-6P 198759-27-2P 198759-28-3P
      198759-32-9P 198759-33-0P 198759-37-4P
      198759-38-5P 198759-47-6P 198759-56-7P
      198759-69-2P 198759-80-7P 198759-82-9P
      198759-84-1P 198759-86-3P 198759-95-4P
      198760-00-8P 198760-05-3P 198760-08-6P
      198760-12-2P 198760-16-6P 198760-25-7P
      198760-34-8P 198760-46-2P 198760-58-6P
      198760-60-0P 198760-63-3P 198760-65-5P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
   198758-90-6P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
RN
     198758-90-6 USPATFULL
     9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-propyl-2-
CN
       oxazolyl)cyclopropyl]-, (1\alpha, 3\beta, 5Z, 7E, 22E, 24S)- (9CI) (CA
       INDEX NAME)
       Absolute stereochemistry.
```

Double bond geometry as shown.

jan delaval - 17 august 2005

```
ANSWER 2 OF 4 USPATFULL on STN
L52
AN
       2003:234856 USPATFULL
ΤI
       Vitamin D derivatives with carbo- or heterocyclic substituents at C-25,
       process for their production, intermediate products and use for the
       production of pharmaceutical agents
IN
       Steinmeyer, Andreas, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Kirsch, Gerald, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Neef, Gunter, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Schwarz, Katica, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Thieroff-Ekerdt, Ruth, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Wiesinger, Herbert, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Haberey, Martin, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Fahnrich, Marianne, Berlin, GERMANY, FEDERAL REPUBLIC OF
PA
       Schering Aktiengesellschaft, Berlin, GERMANY, FEDERAL REPUBLIC
       OF (non-U.S. corporation)
PΙ
       US 6613920
                               20030902
                          В1
AΙ
       US 2000-695091
                               20001025 (9)
RLI
       Division of Ser. No. US 180018
PRAI
       DE 1996-19619036
                           19960430
                                                                     < - -
DT
       Utility
FS
       GRANTED
EXNAM
       Primary Examiner: Qazi, Sabiha
       Millen, White, Zelano, Branigan, P.C.
CLMN
       Number of Claims: 26
ECL
       Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 3329
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The invention relates to vitamin D derivatives of formula (I), processes
       for the production thereof and uses thereof: ##STR1##
       wherein Y.sub.1, Y.sub.2, R.sub.1--R.sub.6, Q and Z are as defined
       herein.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     198758-90-6P 198758-92-8P 198758-94-0P
      198758-96-2P 198759-04-5P 198759-06-7P
      198759-07-8P 198759-08-9P 198759-14-7P
      198759-29-4P 198759-34-1P 198759-39-6P
      198759-48-7P 198759-49-8P 198759-50-1P
      198759-53-4P 198759-57-8P 198759-58-9P
```

```
198759-60-3P 198759-61-4P 198759-70-5P
198759-71-6P 198759-81-8P 198759-83-0P
198759-85-2P 198759-87-4P 198759-89-6P
198759-91-0P 198759-96-5P 198759-97-6P
198759-98-7P 198759-99-8P 198760-01-9P
198760-02-0P 198760-03-1P 198760-04-2P
198760-06-4P 198760-10-0P 198760-14-4P
198760-18-8P 198760-20-2P 198760-21-3P
198760-22-4P 198760-23-5P 198760-24-6P
198760-26-8P 198760-27-9P 198760-28-0P
198760-29-1P 198760-30-4P 198760-31-5P
198760-32-6P 198760-33-7P 198760-35-9P
198760-36-0P 198760-37-1P 198760-38-2P
198760-39-3P 198760-40-6P 198760-41-7P
198760-42-8P 198760-43-9P 198760-44-0P
198760-45-1P 198760-47-3P 198760-48-4P
198760-49-5P 198760-50-8P 198760-51-9P
198760-52-0P 198760-53-1P 198760-54-2P
198760-55-3P 198760-56-4P 198760-57-5P
198760-59-7P 198760-61-1P 198760-64-4P
198760-66-6P 198760-67-7P 198760-68-8P
198760-69-9P 198760-70-2P 198760-71-3P
198760-72-4P 198760-73-5P 198760-74-6P
198760-76-8P 198760-78-0P 198760-80-4P
198760-81-5P 198760-83-7P 198760-85-9P
198760-86-0P 198760-88-2P 198760-90-6P
198760-92-8P 198760-94-0P 198760-96-2P
198760-98-4P 198760-99-5P 198761-00-1P
198761-01-2P 198761-02-3P 198761-03-4P
198761-04-5P 198761-05-6P 198761-06-7P
198761-07-8P 198761-08-9P 198761-09-0P
198761-10-3P 198761-11-4P 198761-12-5P
198761-13-6P 198761-14-7P 198761-15-8P
198761-16-9P 198761-17-0P 198761-18-1P
198761-19-2P 198761-20-5P 198761-21-6P
198761-22-7P 198761-23-8P 198761-24-9P
198761-25-0P 198761-26-1P 198761-27-2P
198761-28-3P 198761-29-4P 198761-30-7P
198761-31-8P 198761-32-9P 198761-33-0P
198761-34-1P 198761-35-2P 198761-36-3P
198761-37-4P 198761-39-6P 198761-41-0P
198761-43-2P 198761-45-4P 198761-46-5P
198761-47-6P 198761-48-7P 198761-50-1P
198761-52-3P 198761-54-5P 198761-55-6P
198761-56-7P 198761-57-8P 198761-58-9P
198761-59-0P 198761-60-3P 198761-61-4P
198761-62-5P 198761-63-6P 198761-64-7P
198761-65-8P 198761-66-9P 198761-67-0P
198761-68-1P 198761-69-2P 198761-70-5P
198761-71-6P 198761-72-7P 198761-73-8P
198761-74-9P 198761-75-0P 198761-76-1P
198761-77-2P 198761-78-3P 198761-79-4P
198761-80-7P 198761-81-8P 198761-82-9P
198761-83-0P 198761-84-1P 198761-85-2P
198761-86-3P 198761-87-4P 198761-88-5P
198761-89-6P 198761-90-9P 198761-91-0P
198761-92-1P 198761-93-2P 198761-94-3P
198761-95-4P 198761-96-5P 198761-97-6P
198761-98-7P 198761-99-8P 198762-00-4P
198762-01-5P 198762-02-6P 198762-03-7P
```

```
198762-04-8P 198762-05-9P 198762-06-0P
       198762-07-1P 198762-08-2P 198762-09-3P
       198762-10-6P 198762-11-7P 198762-12-8P
       198762-13-9P 198762-14-0P 198762-15-1P
       198762-16-2P 198762-18-4P 198762-20-8P
       198762-22-0P 198762-24-2P 198762-26-4P
       198762-27-5P 198762-29-7P 198762-34-4P
       198762-36-6P 198762-39-9P 198762-40-2P
       198762-42-4P 198762-44-6P 198762-46-8P
       198762-48-0P 198762-50-4P 198762-52-6P
       198762-53-7P 198762-55-9P 198762-57-1P
       198762-59-3P
         (preparation of new vitamin D derivs. with carbo- or heterocyclic
         substituents at C-25)
·IT
      198762-61-7P 198762-62-8P 198762-64-0P
       198762-66-2P 198762-67-3P 198762-69-5P
       198762-71-9P 198762-73-1P 198762-75-3P
       198762-76-4P 198762-78-6P 198762-79-7P
       198762-80-0P 198762-82-2P 198762-84-4P
       198762-86-6P 198762-88-8P 198762-90-2P
       198762-93-5P 198762-96-8P 198762-99-1P
       198763-03-0P 198763-06-3P 198763-09-6P
       198763-10-9P 198763-12-1P 198763-14-3P
       198763-16-5P 198763-18-7P 198763-20-1P
       198763-22-3P 198763-23-4P 198763-24-5P
       198763-25-6P 198763-27-8P 198763-29-0P
       198763-31-4P 198763-32-5P 198763-33-6P
       198763-35-8P 198763-37-0P 198763-39-2P
       198763-41-6P 198763-42-7P 198763-43-8P
       198763-44-9P 198763-46-1P 198763-48-3P
       198763-50-7P 198763-52-9P 198763-54-1P
       198763-56-3P 198763-58-5P 198763-60-9P
       198768-25-1P 198768-26-2P
         (preparation of new vitamin D derivs. with carbo- or heterocyclic
         substituents at C-25)
 IT
      198758-88-2P 198759-02-3P 198759-12-5P
       198759-13-6P 198759-27-2P 198759-28-3P
       198759-32-9P 198759-33-0P 198759-37-4P
       198759-38-5P 198759-47-6P 198759-56-7P
       198759-69-2P 198759-80-7P 198759-82-9P
       198759-84-1P 198759-86-3P 198759-95-4P
       198760-00-8P 198760-05-3P 198760-08-6P
       198760-12-2P 198760-16-6P 198760-25-7P
       198760-34-8P 198760-46-2P 198760-58-6P
       198760-60-0P 198760-63-3P 198760-65-5P
         (preparation of new vitamin D derivs. with carbo- or heterocyclic
         substituents at C-25)
 IT
     198758-90-6P
         (preparation of new vitamin D derivs. with carbo- or heterocyclic
         substituents at C-25)
 RN
      198758-90-6 USPATFULL
 CN
      9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-propyl-2-
        oxazolyl)cyclopropyl]-, (1\alpha, 3\beta, 5Z, 7E, 22E, 24S)- (9CI) (CA
        INDEX NAME)
        Absolute stereochemistry.
```

Double bond geometry as shown.

```
L52
     ANSWER 3 OF 4 USPATFULL on STN
ΑN
       2003:203387 USPATFULL
TI
       Vitamin D derivatives with carbo- or heterocyclic substituents at C-25,
       a process for their production, intermediate products and their use for
       producing medicaments
IN
       Steinmeyer, Andreas, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Kirsch, Gerald, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Neef, Gunter, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Schwarz, Katica, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Thieroff-Ekerdt, Ruth, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Wiesinger, Herbert, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Haberey, Martin, Berlin, GERMANY, FEDERAL REPUBLIC OF
         Fahnrich, Marianne, Berlin, GERMANY, FEDERAL REPUBLIC OF
PA
       Schering Aktiengellschaft, Berlin, GERMANY, FEDERAL REPUBLIC
       OF (non-U.S. corporation)
PT
       US 6600058
                          B1
                               20030729
ΑI
       US 2000-695137
                               20001025 (9)
RLI
       Division of Ser. No. US 180018
PRAI
       DE 1996-19619036
                           19960430
                                                                      < - -
DT
       Utility
FS
       GRANTED
EXNAM
       Primary Examiner: Qazi, Sabiha
       Millen, White, Zelano & Branigan, P.C.
LREP
CLMN
       Number of Claims: 27
ECL
       Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 3186
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention concerns new vitamin D derivatives of general formula (I)
AΒ
       a process for their production, their use for production of medicaments,
       and intermediate products used in the process. ##STR1##
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     198758-90-6P 198758-92-8P 198758-94-0P
      198758-96-2P 198759-04-5P 198759-06-7P
      198759-07-8P 198759-08-9P 198759-14-7P
      198759-29-4P 198759-34-1P 198759-39-6P
      198759-48-7P 198759-49-8P 198759-50-1P
      198759-53-4P 198759-57-8P 198759-58-9P
      198759-60-3P 198759-61-4P 198759-70-5P
      198759-71-6P 198759-81-8P 198759-83-0P
```

```
198759-85-2P 198759-87-4P 198759-89-6P
198759-91-0P 198759-96-5P 198759-97-6P
198759-98-7P 198759-99-8P 198760-01-9P
198760-02-0P 198760-03-1P 198760-04-2P
198760-06-4P 198760-10-0P 198760-14-4P
198760-18-8P 198760-20-2P 198760-21-3P
198760-22-4P 198760-23-5P 198760-24-6P
198760-26-8P 198760-27-9P 198760-28-0P
198760-29-1P 198760-30-4P 198760-31-5P
198760-32-6P 198760-33-7P 198760-35-9P
198760-36-0P 198760-37-1P 198760-38-2P
198760-39-3P 198760-40-6P 198760-41-7P
198760-42-8P 198760-43-9P 198760-44-0P
198760-45-1P 198760-47-3P 198760-48-4P
198760-49-5P 198760-50-8P 198760-51-9P
198760-52-0P 198760-53-1P 198760-54-2P
198760-55-3P 198760-56-4P 198760-57-5P
198760-59-7P 198760-61-1P 198760-64-4P
198760-66-6P 198760-67-7P 198760-68-8P
198760-69-9P 198760-70-2P 198760-71-3P
198760-72-4P 198760-73-5P 198760-74-6P
198760-76-8P 198760-78-0P 198760-80-4P
198760-81-5P 198760-83-7P 198760-85-9P
198760-86-0P 198760-88-2P 198760-90-6P
198760-92-8P 198760-94-0P 198760-96-2P
198760-98-4P 198760-99-5P 198761-00-1P
198761-01-2P 198761-02-3P 198761-03-4P
198761-04-5P 198761-05-6P 198761-06-7P
198761-07-8P 198761-08-9P 198761-09-0P
198761-10-3P 198761-11-4P 198761-12-5P
198761-13-6P 198761-14-7P 198761-15-8P
198761-16-9P 198761-17-0P 198761-18-1P
198761-19-2P 198761-20-5P 198761-21-6P
198761-22-7P 198761-23-8P 198761-24-9P
198761-25-0P 198761-26-1P 198761-27-2P
198761-28-3P 198761-29-4P 198761-30-7P
198761-31-8P 198761-32-9P 198761-33-0P
198761-34-1P 198761-35-2P 198761-36-3P
198761-37-4P 198761-39-6P 198761-41-0P
198761-43-2P 198761-45-4P 198761-46-5P
198761-47-6P 198761-48-7P 198761-50-1P
198761-52-3P 198761-54-5P 198761-55-6P
198761-56-7P 198761-57-8P 198761-58-9P
198761-59-0P 198761-60-3P 198761-61-4P
198761-62-5P 198761-63-6P 198761-64-7P
198761-65-8P 198761-66-9P 198761-67-0P
198761-68-1P 198761-69-2P 198761-70-5P
198761-71-6P 198761-72-7P 198761-73-8P
198761-74-9P 198761-75-0P 198761-76-1P
198761-77-2P 198761-78-3P 198761-79-4P
198761-80-7P 198761-81-8P 198761-82-9P
198761-83-0P 198761-84-1P 198761-85-2P
198761-86-3P 198761-87-4P 198761-88-5P
198761-89-6P 198761-90-9P 198761-91-0P
198761-92-1P 198761-93-2P 198761-94-3P
198761-95-4P 198761-96-5P 198761-97-6P
198761-98-7P 198761-99-8P 198762-00-4P
198762-01-5P 198762-02-6P 198762-03-7P
198762-04-8P 198762-05-9P 198762-06-0P
198762-07-1P 198762-08-2P 198762-09-3P
```

```
198762-10-6P 198762-11-7P 198762-12-8P
      198762-13-9P 198762-14-0P 198762-15-1P
      198762-16-2P 198762-18-4P 198762-20-8P
      198762-22-0P 198762-24-2P 198762-26-4P
      198762-27-5P 198762-29-7P 198762-34-4P
      198762-36-6P 198762-39-9P 198762-40-2P
      198762-42-4P 198762-44-6P 198762-46-8P
      198762-48-0P 198762-50-4P 198762-52-6P
      198762-53-7P 198762-55-9P 198762-57-1P
      198762-59-3P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
TΤ
     198762-61-7P 198762-62-8P 198762-64-0P
      198762-66-2P 198762-67-3P 198762-69-5P
      198762-71-9P 198762-73-1P 198762-75-3P
      198762-76-4P 198762-78-6P 198762-79-7P
      198762-80-0P 198762-82-2P 198762-84-4P
      198762-86-6P 198762-88-8P 198762-90-2P
      198762-93-5P 198762-96-8P 198762-99-1P
      198763-03-0P 198763-06-3P 198763-09-6P
      198763-10-9P 198763-12-1P 198763-14-3P
      198763-16-5P 198763-18-7P 198763-20-1P
      198763-22-3P 198763-23-4P 198763-24-5P
      198763-25-6P 198763-27-8P 198763-29-0P
      198763-31-4P 198763-32-5P 198763-33-6P
      198763-35-8P 198763-37-0P 198763-39-2P
      198763-41-6P 198763-42-7P 198763-43-8P
      198763-44-9P 198763-46-1P 198763-48-3P
      198763-50-7P 198763-52-9P 198763-54-1P
      198763-56-3P 198763-58-5P 198763-60-9P
      198768-25-1P 198768-26-2P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
IT
     198758-88-2P 198759-02-3P 198759-12-5P
      198759-13-6P 198759-27-2P 198759-28-3P
      198759-32-9P 198759-33-0P 198759-37-4P
      198759-38-5P 198759-47-6P 198759-56-7P
      198759-69-2P 198759-80-7P 198759-82-9P
      198759-84-1P 198759-86-3P 198759-95-4P
      198760-00-8P 198760-05-3P 198760-08-6P
      198760-12-2P 198760-16-6P 198760-25-7P
      198760-34-8P 198760-46-2P 198760-58-6P
      198760-60-0P 198760-63-3P 198760-65-5P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
TI
    198758-90-6P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
     198758-90-6 USPATFULL
RN
CN
     9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-propyl-2-
       oxazolyl)cyclopropyl]-, (1\alpha, 3\beta, 5Z, 7E, 22E, 24S)- (9CI) (CA
       INDEX NAME)
       Absolute stereochemistry.
       Double bond geometry as shown.
```

198759-85-2P 198759-87-4P 198759-89-6P

```
L52
    ANSWER 4 OF 4 USPATFULL on STN
AN
       2002:92818 USPATFULL
TI
       NEW VITAMIN D DERIVATIVES WITH CARBO-OR HETEROCYCLIC SUBSTITUENTS AT
       C-25, A PROCESS FOR THEIR PRODUCTION, INTERMEDIATE PRODUCTS AND THEIR
       USE FOR PRODUCING MEDICAMENTS
IN
       STEINMEYER, ANDREAS, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         KIRSCH, GERALD, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         NEFF, GUNTER, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         SCHWARZ, KATICA, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         THIEROFF-EKERDT, RUTH, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         WIESINGER, HERBERT, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         HABEREY, MARTIN, BERLIN, GERMANY, FEDERAL REPUBLIC OF
         FAHNRICH, MARIANNE, BERLIN, GERMANY, FEDERAL REPUBLIC OF
PΙ
       US 2002049344
                                20020425
                          A1
       US 6642218
                          B<sub>2</sub>
                                20031104
ΑI
       US 1998-180018
                          A1
                                19981211 (9)
       WO 1997-EP2013
                                19970421
PRAI
       DE 1996-19619036
                           19960430
                                                                      <--
DT
       Utility
FS
       APPLICATION
LREP
       MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE
       1400, ARLINGTON, VA, 22201
CLMN
       Number of Claims: 10
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 3651
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention concerns new vitamin D derivatives of general formula (I)
AB
       a process for their production, their use for production of medicaments,
       and intermediate products used in the process.
                                                         ##STR1##
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     198758-90-6P 198758-92-8P 198758-94-0P
      198758-96-2P 198759-04-5P 198759-06-7P
      198759-07-8P 198759-08-9P 198759-14-7P
      198759-29-4P 198759-34-1P 198759-39-6P
      198759-48-7P 198759-49-8P 198759-50-1P
      198759-53-4P 198759-57-8P 198759-58-9P
      198759-60-3P 198759-61-4P 198759-70-5P
      198759-71-6P 198759-81-8P 198759-83-0P
```

```
198759-91-0P 198759-96-5P 198759-97-6P
198759-98-7P 198759-99-8P 198760-01-9P
198760-02-0P 198760-03-1P 198760-04-2P
198760-06-4P 198760-10-0P 198760-14-4P
198760-18-8P 198760-20-2P 198760-21-3P
198760-22-4P 198760-23-5P 198760-24-6P
198760-26-8P 198760-27-9P 198760-28-0P
198760-29-1P 198760-30-4P 198760-31-5P
198760-32-6P 198760-33-7P 198760-35-9P
198760-36-0P 198760-37-1P 198760-38-2P
198760-39-3P 198760-40-6P 198760-41-7P
198760-42-8P 198760-43-9P 198760-44-0P
198760-45-1P 198760-47-3P 198760-48-4P
198760-49-5P 198760-50-8P 198760-51-9P
198760-52-0P 198760-53-1P 198760-54-2P
198760-55-3P 198760-56-4P 198760-57-5P
198760-59-7P 198760-61-1P 198760-64-4P
198760-66-6P 198760-67-7P 198760-68-8P
198760-69-9P 198760-70-2P 198760-71-3P
198760-72-4P 198760-73-5P 198760-74-6P
198760-76-8P 198760-78-0P 198760-80-4P
198760-81-5P 198760-83-7P 198760-85-9P
198760-86-0P 198760-88-2P 198760-90-6P
198760-92-8P 198760-94-0P 198760-96-2P
198760-98-4P 198760-99-5P 198761-00-1P
198761-01-2P 198761-02-3P 198761-03-4P
198761-04-5P 198761-05-6P 198761-06-7P
198761-07-8P 198761-08-9P 198761-09-0P
198761-10-3P 198761-11-4P 198761-12-5P
198761-13-6P 198761-14-7P 198761-15-8P
198761-16-9P 198761-17-0P 198761-18-1P
198761-19-2P 198761-20-5P 198761-21-6P
198761-22-7P 198761-23-8P 198761-24-9P
198761-25-0P 198761-26-1P 198761-27-2P
198761-28-3P 198761-29-4P 198761-30-7P
198761-31-8P 198761-32-9P 198761-33-0P
198761-34-1P 198761-35-2P 198761-36-3P
198761-37-4P 198761-39-6P 198761-41-0P
198761-43-2P 198761-45-4P 198761-46-5P
198761-47-6P 198761-48-7P 198761-50-1P
198761-52-3P 198761-54-5P 198761-55-6P
198761-56-7P 198761-57-8P 198761-58-9P
198761-59-0P 198761-60-3P 198761-61-4P
198761-62-5P 198761-63-6P 198761-64-7P
198761-65-8P 198761-66-9P 198761-67-0P
198761-68-1P 198761-69-2P 198761-70-5P
198761-71-6P 198761-72-7P 198761-73-8P
198761-74-9P 198761-75-0P 198761-76-1P
198761-77-2P 198761-78-3P 198761-79-4P
198761-80-7P 198761-81-8P 198761-82-9P
198761-83-0P 198761-84-1P 198761-85-2P
198761-86-3P 198761-87-4P 198761-88-5P
198761-89-6P 198761-90-9P 198761-91-0P
198761-92-1P 198761-93-2P 198761-94-3P
198761-95-4P 198761-96-5P 198761-97-6P
198761-98-7P 198761-99-8P 198762-00-4P
198762-01-5P 198762-02-6P 198762-03-7P
198762-04-8P 198762-05-9P 198762-06-0P
198762-07-1P 198762-08-2P 198762-09-3P
198762-10-6P 198762-11-7P 198762-12-8P
```

```
198762-13-9P 198762-14-0P 198762-15-1P
      198762-16-2P 198762-18-4P 198762-20-8P
      198762-22-0P 198762-24-2P 198762-26-4P
      198762-27-5P 198762-29-7P 198762-34-4P
      198762-36-6P 198762-39-9P 198762-40-2P
      198762-42-4P 198762-44-6P 198762-46-8P
      198762-48-0P 198762-50-4P 198762-52-6P
      198762-53-7P 198762-55-9P 198762-57-1P
      198762-59-3P 198762-61-7P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
IT
     198762-62-8P 198762-64-0P 198762-66-2P
      198762-67-3P 198762-69-5P 198762-71-9P
      198762-73-1P 198762-75-3P 198762-76-4P
      198762-78-6P 198762-79-7P 198762-80-0P
      198762-82-2P 198762-84-4P 198762-86-6P
      198762-88-8P 198762-90-2P 198762-93-5P
      198762-96-8P 198762-99-1P 198763-03-0P
      198763-06-3P 198763-09-6P 198763-10-9P
      198763-12-1P 198763-14-3P 198763-16-5P
      198763-18-7P 198763-20-1P 198763-22-3P
      198763-23-4P 198763-24-5P 198763-25-6P
      198763-27-8P 198763-29-0P 198763-31-4P
      198763-32-5P 198763-33-6P 198763-35-8P
      198763-37-0P 198763-39-2P 198763-41-6P
      198763-42-7P 198763-43-8P 198763-44-9P
      198763-46-1P 198763-48-3P 198763-50-7P
      198763-52-9P 198763-54-1P 198763-56-3P
      198763-58-5P 198763-60-9P 198768-25-1P
      198768-26-2P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
IT
     198758-88-2P 198759-02-3P 198759-12-5P
      198759-13-6P 198759-27-2P 198759-28-3P
      198759-32-9P 198759-33-0P 198759-37-4P
      198759-38-5P 198759-47-6P 198759-56-7P
      198759-69-2P 198759-80-7P 198759-82-9P
      198759-84-1P 198759-86-3P 198759-95-4P
      198760-00-8P 198760-05-3P 198760-08-6P
      198760-12-2P 198760-16-6P 198760-25-7P
      198760-34-8P 198760-46-2P 198760-58-6P
      198760-60-0P 198760-63-3P 198760-65-5P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
IT
    198758-90-6P
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
RN
     198758-90-6 USPATFULL
CN
     9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-propyl-2-
       oxazolyl)cyclopropyl] -, (1\alpha, 3\beta, 5Z, 7E, 22E, 24S) - (9CI)
       INDEX NAME)
       Absolute stereochemistry.
```

Double bond geometry as shown.

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 07:39:56 ON 17 AUG 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 17 Aug 2005 VOL 143 ISS 8 FILE LAST UPDATED: 16 Aug 2005 (20050816/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all fhitstr 146

L46 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:740204 HCAPLUS

DN 128:3826

ED Entered STN: 24 Nov 1997

TI Process for the production of new vitamin D derivatives with carbo- or heterocyclic substituents at C-25 and their intermediates

IN Steinmeyer, Andreas; Kirsch, Gerald; Neef, Guenter; Schwarz, Katica; Thieroff-Ekerdt, Ruth; Wiesinger, Herbert; Haberey, Martin; Fahnrich, Marianne

PA Schering Aktiengesellschaft, Germany

SO PCT Int. Appl., 133 pp. CODEN: PIXXD2

```
TG
    Patent
LA
    German
    ICM C07C401-00
IC
    ICS A61K031-59
CC
    32-7 (Steroids)
    Section cross-reference(s): 1, 2
FAN.CNT 1
                                    APPLICATION NO.
                      KIND
                             DATE
    PATENT NO.
                                                        DATE
                                                            -----
    -----
                      ----
                             -----
                                        -----
                             19971106 WO 1997-EP2013 19970421 <--
PΙ
    WO 9741096
                       A1
        W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DK, EE, ES,
           FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
           LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
           SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG,
           KZ, MD, RU, TJ, TM
        RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,
           GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
           ML, MR, NE, SN, TD, TG
    DE 19619036
                       A1
                             19971113
                                       DE 1996-19619036
                                                             19960430 <--
    CA 2253288
                       AA
                             19971106
                                     CA 1997-2253288
                                                             19970421 <--
    AU 9727666
                       A1
                             19971119
                                      AU 1997-27666
                                                             19970421 <--
    AU 730394
                       B2
                             20010308
    EP 900198
                       A1
                             19990310 EP 1997-921683
                                                             19970421 <--
    EP 900198
                       B1
                             20030312
          AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, FI
                             19990519
    CN 1216978
                       Α
                                        CN 1997-194216
                                                             19970421 <--
    NZ 332488
                       Α
                             20000327
                                        NZ 1997-332488
                                                             19970421 <--
    JP 2000510826
                       T2
                             20000822
                                       JP 1997-538533
                                                             19970421 <--
    SK 283041
                      B6
                             20030204
                                       SK 1998-1464
                                                            19970421 <--
                      , E
    AT 234280
                             20030315
                                      AT 1997-921683
                                                            19970421 <--
                      T
    PT 900198
                             20030630
                                      PT 1997-921683
                                                            19970421 <--
                      Т3
    ES 2192680
                             20031016
                                      ES 1997-921683
                                                             19970421 <--
    RU 2223954
                      C2
                             20040220
                                      RU 1998-121426
                                                             19970421 <--
    PL 187766
                      B1
                             20041029
                                      PL 1997-329597
                                                            19970421 <--
    ZA 9703757
                      Α
                             19980820
                                      ZA 1997-3757
                                                             19970430 <--
    TW 568902
                      В
                             20040101
                                       TW 1997-86105733
                                                            19970430 <--
    NO 9805038
                      Α
                             19981223
                                      NO 1998-5038
                                                             19981029 <--
    US 2002049344
                      A1
                             20020425
                                      US 1998-180018
                                                             19981211 <--
    US 6642218
                      B2
                             20031104
    HK 1020042
                      A1
                             20050520
                                      HK 1999-105222
                                                             19991112 <--
    US 6600058
                      B1
                             20030729
                                      US 2000-695137
                                                             20001025 <--
    US 6613920
                      В1
                             20030902
                                      US 2000-695091
                                                             20001025 <--
    AU 765916
                      B2
                             20031002
                                      AU 2001-46051
                                                             20010518
    US 2005080058
                      A1
                             20050414
                                       US 2003-658326
                                                             20030910 <--
PRAI DE 1996-19619036
                      Α
                             19960430 <--
    AU 1997-27666
                      A3
                             19970421
    WO 1997-EP2013
                       W
                             19970421 <--
    US 1998-180018
                       Α3
                             19981211 <--
CLASS
PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
                     WO 9741096
               ICM
                      C07C401-00
               ICS
                      A61K031-59
                      C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
WO 9741096
               ECLA
                      C07D263/32; C07D271/06B; C07D271/10B; C07D277/24;
                      C07D307/42E; C07D333/16
DE 19619036
               ECLA
                      C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
                      C07D263/32; C07D271/06B; C07D271/10B; C07D277/24;
                      C07D307/42E; C07D333/16
```

```
US 2002049344
                 NCL
                        552/653.000
                        C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
                 ECLA
                        C07D263/32; C07D271/06B; C07D271/10B; C07D277/24;
                        C07D307/42E; C07D333/16
                                                                              < - -
HK 1020042
                        C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
                 ECLA
                        C07D263/32; C07D271/06B; C07D271/10B; C07D277/24;
                        C07D307/42E; C07D333/16
US 6600058
                        552/653.000; 548/237.000; 548/239.000
                 NCL
                 ECLA
                        C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
                        C07D263/32; C07D271/06B; C07D271/10B; C07D277/24;
                        C07D307/42E; C07D333/16
US 6613920
                 NCL
                        552/653.000; 548/237.000; 548/239.000
                 ECLA
                        C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
                        C07D263/32; C07D271/06B; C07D271/10B; C07D277/24;
                        C07D307/42E; C07D333/16
US 2005080058
                 NCL
                        514/167.000
                 ECLA
                        C07C035/32; C07C401/00; C07D207/32C3; C07D233/54C2D2;
                        CO7D263/32; CO7D271/06B; CO7D271/10B; CO7D277/24;
                        C07D307/42E; C07D333/16
os
     CASREACT 128:3826; MARPAT 128:3826
GΙ
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention concerns a process for the production of new vitamin D derivs. I [Y1 = H, OH, alkanoyloxy, aroyloxy; Y2 = H, alkanoyl, aroyl; R1, R2 = H; R1R2 = CH2; R3, R4 = H, Cl, F, alkyl; R3R4 = CH2; R3(C-20)R4 = carbocyclic ring; Q = alkyl chain containing an α - or β -OH, ether, ester, amino group, keto group or halogen; R5, R6 = H, Cl, F, CF3, (un)saturated alkyl; R5(C-25)R6 = (un)saturated carbocyclic ring; Z = (un)substituted, (un)saturated or

aromatic 5-, 6-membered carbo-, heterocyclic ring), the intermediates used in the process, and the production of medicaments. Thus, vitamin D analog II was prepared via condensation of aldehyde III with IV, followed by deprotection. II had competition factor of 2 vs. calcitriol towards receptor binding and dose relation for differentiation induction in HL 60 cells of 1.9 vs. calctriol.

- ST vitamin D carbocyclic heterocyclic analog prepn
- IT Antitumor agents

(preparation of new vitamin D derivs. with carbo- or heterocyclic substituents at C-25)

IT Steroids, preparation

Vitamins

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of new vitamin D derivs. with carbo- or heterocyclic substituents at C-25)

- IT Vitamin D receptors
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(preparation of new vitamin D derivs. with carbo- or heterocyclic substituents at C-25)

- IT 7440-70-2, Calcium, biological studies
 - RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (hypercalcemia; induction; preparation of new vitamin D derivs. with carbo-or heterocyclic substituents at C-25)

```
IT
     50-14-6DP, Ergocalciferol, analogs
                                          67-97-0DP, Cholecalciferol, analogs
     19356-17-3DP, 25-Hydroxycholecalciferol, analogs
                                                       32222-06-3P, Calcitriol
     41294-56-8DP, 1\alpha-Hydroxycholecalciferol, analogs
     198758-90-6P 198758-92-8P 198758-94-0P
     198758-96-2P 198759-04-5P 198759-06-7P
     198759-07-8P 198759-08-9P 198759-14-7P
     198759-29-4P 198759-34-1P 198759-39-6P
     198759-48-7P 198759-49-8P 198759-50-1P
     198759-53-4P 198759-57-8P 198759-58-9P
     198759-60-3P 198759-61-4P 198759-70-5P
     198759-71-6P 198759-81-8P 198759-83-0P
     198759-85-2P 198759-87-4P 198759-89-6P
     198759-91-0P 198759-96-5P 198759-97-6P
     198759-98-7P 198759-99-8P 198760-01-9P
     198760-02-0P 198760-03-1P 198760-04-2P
     198760-06-4P
                    198760-09-7P 198760-10-0P
                                                 198760-13-3P
     198760-14-4P
                    198760-17-7P 198760-18-8P
     198760-20-2P 198760-21-3P 198760-22-4P
     198760-23-5P 198760-24-6P 198760-26-8P
     198760-27-9P 198760-28-0P 198760-29-1P
     198760-30-4P 198760-31-5P 198760-32-6P
     198760-33-7P 198760-35-9P 198760-36-0P
     198760-37-1P 198760-38-2P 198760-39-3P
     198760-40-6P 198760-41-7P 198760-42-8P
     198760-43-9P 198760-44-0P 198760-45-1P
     198760-47-3P 198760-48-4P 198760-49-5P
     198760-50-8P 198760-51-9P 198760-52-0P
     198760-53-1P 198760-54-2P 198760-55-3P
     198760-56-4P 198760-57-5P 198760-59-7P
     198760-61-1P 198760-64-4P 198760-66-6P
     198760-67-7P 198760-68-8P 198760-69-9P
     198760-70-2P 198760-71-3P 198760-72-4P
     198760-73-5P 198760-74-6P 198760-76-8P
     198760-78-0P 198760-80-4P 198760-81-5P
     198760-83-7P 198760-85-9P 198760-86-0P
     198760-88-2P 198760-90-6P 198760-92-8P
     198760-94-0P 198760-96-2P 198760-98-4P
     198760-99-5P 198761-00-1P 198761-01-2P
     198761-02-3P 198761-03-4P 198761-04-5P
     198761-05-6P 198761-06-7P 198761-07-8P
     198761-08-9P 198761-09-0P 198761-10-3P
     198761-11-4P 198761-12-5P 198761-13-6P
     198761-14-7P 198761-15-8P 198761-16-9P
     198761-17-0P 198761-18-1P 198761-19-2P
     198761-20-5P 198761-21-6P 198761-22-7P
     198761-23-8P 198761-24-9P 198761-25-0P
     198761-26-1P 198761-27-2P 198761-28-3P
     198761-29-4P 198761-30-7P 198761-31-8P
     198761-32-9P 198761-33-0P 198761-34-1P
     198761-35-2P 198761-36-3P 198761-37-4P
     198761-39-6P 198761-41-0P 198761-43-2P
     198761-45-4P 198761-46-5P 198761-47-6P
     198761-48-7P 198761-50-1P 198761-52-3P
     198761-54-5P 198761-55-6P 198761-56-7P
     198761-57-8P 198761-58-9P 198761-59-0P
     198761-60-3P 198761-61-4P 198761-62-5P
     198761-63-6P 198761-64-7P 198761-65-8P
     198761-66-9P 198761-67-0P 198761-68-1P
     198761-69-2P 198761-70-5P 198761-71-6P
     198761-72-7P 198761-73-8P 198761-74-9P
```

```
198761-75-0P 198761-76-1P 198761-77-2P
198761-78-3P 198761-79-4P 198761-80-7P
198761-81-8P 198761-82-9P 198761-83-0P
198761-84-1P 198761-85-2P 198761-86-3P
198761-87-4P 198761-88-5P 198761-89-6P
198761-90-9P 198761-91-0P 198761-92-1P
198761-93-2P 198761-94-3P 198761-95-4P
198761-96-5P 198761-97-6P 198761-98-7P
198761-99-8P 198762-00-4P 198762-01-5P
198762-02-6P 198762-03-7P 198762-04-8P
198762-05-9P 198762-06-0P 198762-07-1P
198762-08-2P 198762-09-3P 198762-10-6P
198762-11-7P 198762-12-8P 198762-13-9P
198762-14-0P 198762-15-1P 198762-16-2P
198762-18-4P 198762-20-8P 198762-22-0P
198762-24-2P 198762-26-4P 198762-27-5P
198762-29-7P 198762-34-4P 198762-36-6P
198762-39-9P 198762-40-2P 198762-42-4P
198762-44-6P 198762-46-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of new vitamin D derivs. with carbo- or heterocyclic
   substituents at C-25)
198762-48-0P 198762-50-4P 198762-52-6P
198762-53-7P 198762-55-9P 198762-57-1P
198762-59-3P 198762-61-7P 198762-62-8P
198762-64-0P 198762-66-2P 198762-67-3P
198762-69-5P 198762-71-9P 198762-73-1P
198762-75-3P 198762-76-4P 198762-78-6P
198762-79-7P 198762-80-0P 198762-82-2P
198762-84-4P 198762-86-6P 198762-88-8P
198762-90-2P 198762-93-5P 198762-96-8P
198762-99-1P 198763-03-0P 198763-06-3P
198763-09-6P 198763-10-9P 198763-12-1P
198763-14-3P 198763-16-5P 198763-18-7P
198763-20-1P 198763-22-3P 198763-23-4P
198763-24-5P 198763-25-6P 198763-27-8P
198763-29-0P 198763-31-4P 198763-32-5P
198763-33-6P 198763-35-8P 198763-37-0P
198763-39-2P 198763-41-6P 198763-42-7P
198763-43-8P 198763-44-9P 198763-46-1P
198763-48-3P 198763-50-7P 198763-52-9P
198763-54-1P 198763-56-3P 198763-58-5P
198763-60-9P 198768-25-1P 198768-26-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of new vitamin D derivs. with carbo- or heterocyclic
   substituents at C-25)
                         96-20-8, 2-Amino-1-butanol
78-95-5, Chloroacetone
                                                      104-09-6,
(4-Methylphenyl)acetaldehyde 104-87-0, 4-Methylbenzaldehyde
                                                                122-03-2,
                         124-68-5, 2-Amino-2-methyl-1-propanol
4-Isopropylbenzaldehyde
816-40-0, 1-Bromo-2-butanone
                              817-71-0, 1-Bromo-2-pentanone
                                                               1200-14-2,
                     2637-34-5, 2-Mercaptopyridine
4-Butylbenzaldehyde
                                                      4009-98-7,
(Methoxymethyl) triphenylphosphonium chloride
                                               5856-63-3,
                       6120-95-2, 1-Phenylcyclopropanecarboxylic acid
(-)-2-Amino-1-butanol
6168-72-5, DL-2-Amino-1-propanol
                                   7737-17-9, 1-Amino-2-propanone
                16369-14-5, 2-Amino-1-pentanol
hydrochloride
                                                21419-28-3,
                                   26818-07-5, 1-Bromo-2-hexanone
1-Amino-2-hexanone hydrochloride
```

IT

IT

```
29335-36-2, Propionylamidoxime 41172-98-9, 1-Amino-2-pentanone
    hydrochloride
                    56613-80-0, D-(-)-\alpha-Phenylglycinol 57390-38-2,
     2-Aminopropionaldehyde dimethyl acetal
                                             67015-06-9, Valerylamidoxime
     89007-04-5, 1-Amino-2-heptanone hydrochloride
                                                   89544-84-3,
     1-Bromocyclopropanecarboxylic acid
                                         91083-05-5, [3-(1,3-Dioxolan-2-
     yl)propyl]magnesium bromide
                                  108661-54-7, 1-Amino-2-butanone
     hydrochloride
                    112828-13-4
                                  115648-67-4
                                                156965-17-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of new vitamin D derivs. with carbo- or heterocyclic
        substituents at C-25)
IT
     1007-71-2P, 1-Acetyl-1-phenylcyclopropane
                                                1901-26-4P,
     3-(4-Methylphenyl)-3-buten-2-one
                                      4395-92-0P, (4-
     Isopropylphenyl)acetaldehyde
                                   56998-27-7P
                                                 57132-22-6P,
     3-(4-Methylphenyl)-3-buten-2-ol
                                      64835-61-6P, β-Methoxy-4-
                   69520-23-6P, β-Methoxy-4-isopropylstyrene
     butylstyrene
     69690-25-1P, β-Methoxy-4-methylstyrene 96999-02-9P,
     2-Bromocyclopropanecarbonyl chloride
                                           105652-63-9P, \alpha-(4-
     Methylphenyl)acrolein 112924-91-1P
                                           134404-41-4P
                                                         134523-96-9P
     156965-12-7P
                   163208-19-3P
                                  198758-82-6P
                                                 198758-83-7P
                                                                198758-84-8P,
     2-(1-Bromocyclopropyl)-5-propyloxazole
                                             198758-85-9P.
     2-(1-Bromocyclopropyl)-5-methyloxazole 198758-86-0P,
     2-(1-Bromocyclopropyl)-5-ethyloxazole
                                            198758-87-1P, 2-(1-
     Bromocyclopropyl) -5-pentyloxazole 198758-88-2P
                                                    198758-97-3P,
     1-Bromocyclopropanecarboxamide
                                    198758-98-4P, 2-(1-Bromocyclopropyl)-5-
     ethylthiazole 198758-99-5P, 2-(1-Bromocyclopropyl)-5-methylthiazole
     198759-00-1P, 2-(1-Bromocyclopropyl)-5-propylthiazole
                                                           198759-01-2P,
     2-(1-Bromocyclopropyl)-5-butylthiazole 198759-02-3P
     198759-09-0P, N,N-Dimethyl-1-phenylcyclopropanecarboxamide
                                                                  198759-10-3P
     198759-11-4P 198759-12-5P 198759-13-6P
                                             198759-15-8P,
     1-Acetyl-1-(4-methylphenyl)cyclopropane 198759-16-9P,
     \alpha-(4-Isopropylphenyl)acrolein 198759-17-0P, 3-(4-Isopropylphenyl)-
                   198759-18-1P, 3-(4-Isopropylphenyl)-3-buten-2-one
     3-buten-2-ol
     198759-19-2P, 1-Acetyl-1-(4-isopropylphenyl)cyclopropane 198759-20-5P,
     (4-Butylphenyl) acetaldehyde 198759-21-6P, \alpha-(4-
     Butylphenyl)acrolein 198759-22-7P, 3-(4-Butylphenyl)-3-buten-2-ol
     198759-23-8P, 3-(4-Butylphenyl)-3-buten-2-one 198759-24-9P,
     1-Acetyl-1-(4-butylphenyl)cyclopropane 198759-25-0P
                                                            198759-26-1P
     198759-27-2P 198759-28-3P 198759-30-7P
                                               198759-31-8P
     198759-32-9P 198759-33-0P
                                198759-35-2P
                                               198759-36-3P
     198759-37-4P 198759-38-5P
                                198759-40-9P
                                               198759-41-0P
     198759-42-1P, 2-(1-Bromocyclopropyl)-4-methyloxazole
                                                           198759-43-2P
     198759-44-3P
                  198759-45-4P, 2-(1-Bromocyclopropyl)-4-ethyloxazole
     198759-46-5P, 2-(1-Bromocyclopropyl)-4-propyloxazole 198759-47-6P
     198759-51-2P
                  198759-52-3P, 2-(1-Bromocyclopropyl)-5-butyloxazole
     198759-54-5P, 2-(1-Bromocyclopropyl)-5-butylthiazole
                                                           198759-55-6P,
     2-(1-Bromocyclopropyl)-5-ethylthiazole 198759-56-7P
     198759-59-0P
                  198759-62-5P, S-(2-Pyridyl) 1-bromocyclopropanethiocarboxyl
                        198759-65-8P, 1-Bromo-1-(2-pyridyl)cyclopropane
          198759-64-7P
                   198759-68-1P, 1-Bromo-1-(6-methyl-2-pyridyl)cyclopropane
     198759-67-0P
                   198759-72-7P
                                  198759-73-8P
     198759-69-2P
                                                 198759-74-9P
     198759-75-0P
                   198759-76-1P
                                  198759-77-2P
                                                 198759-78-3P
                                                                 198759-79-4P
     198759-80-7P 198759-82-9P 198759-84-1P
     198759-86-3P
                   198759-88-5P
                                 198759-90-9P
                                                 198759-92-1P,
     1-Bromo-N-(2-oxopropyl)cyclopropanecarboxamide
                                                      198759-93-2P,
     1-Bromo-N-(2-oxobutyl)cyclopropanecarboxamide
                                                     198759-94-3P,
     1-Bromo-N-(2-oxoheptyl)cyclopropanecarboxamide 198759-95-4P
     198760-00-8P 198760-05-3P
                                198760-07-5P
                   198760-11-1P 198760-12-2P
                                                198760-15-5P
     198760-08-6P
     198760-16-6P 198760-25-7P 198760-34-8P
     198760-46-2P 198760-58-6P 198760-60-0P
```

198760-63-3P 198760-65-5P 198903-74-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of new vitamin D derivs. with carbo- or heterocyclic substituents at C-25)

IT 198758-90-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of new vitamin D derivs. with carbo- or heterocyclic substituents at C-25)

RN 198758-90-6 HCAPLUS

CN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-propyl-2-oxazolyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

=> fil reg

FILE 'REGISTRY' ENTERED AT 07:40:42 ON 17 AUG 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 16 AUG 2005 HIGHEST RN 860495-66-5 DICTIONARY FILE UPDATES: 16 AUG 2005 HIGHEST RN 860495-66-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

* The CA roles and document type information have been removed from *

Structure search iteration limits have been increased. See HELP SLIMITS for details.

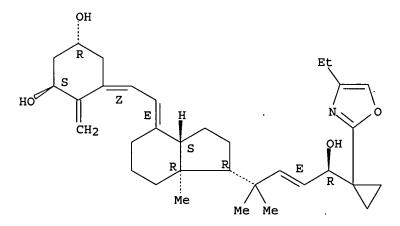
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> => d scan 141

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-ethyl-2-oxazolyl)cyclopropyl]-20-methyl-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C33 H47 N O4

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

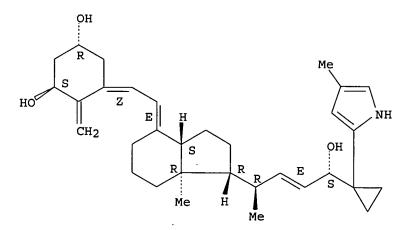
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):25

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-[(4R)-4,5-dihydro-4-propyl-2-oxazolyl]cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C33 H49 N O4

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-methyl-1H-pyrrol-2-yl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)
MF C32 H45 N O3

Absolute stereochemistry.

Double bond geometry as shown.

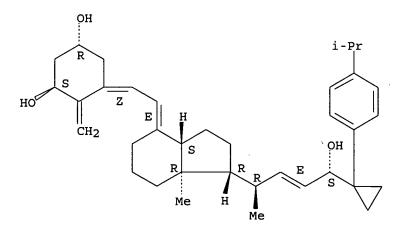


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-[4-(1-methylethyl)phenyl]cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)
MF C36 H50 O3

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

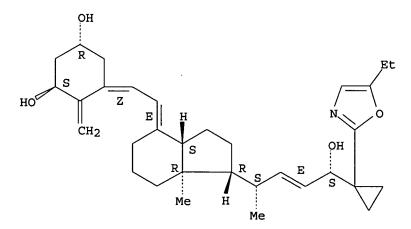
L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-butyl-2-thiazolyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)
MF C34 H49 N O3 S

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-ethyl-2-oxazolyl)cyclopropyl]-, (1α,3β,5Z,7E,20S,22E,24S)- (9CI)

MF C32 H45 N O4

Absolute stereochemistry.
Double bond geometry as shown.



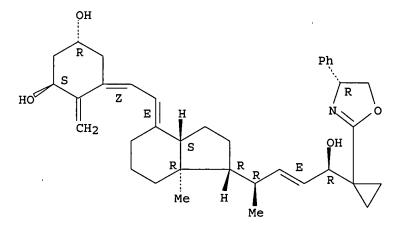
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-ethyl-1,3,4-oxadiazol-2-yl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C31 H44 N2 O4

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-[(4R)-4,5-dihydro-4-phenyl-2-oxazolyl]cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C36 H47 N O4

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(2-pyridinyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)
MF C32 H43 N O3

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 27-Nor-9,10-secocholesta-5,7,10(19),22-tetraen-24-one,
 1,3-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-26-[1-(2-propyl-1,3-dioxolan-2-yl)cyclopropyl]-, (1α,3β,5Z,7E,22E)- (9CI)
MF C47 H80 O5 Si2

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-methyl-2-oxazolyl)cyclopropyl]-, (1α,3β,5Z,7E,20S,22E,24S)- (9CI)
MF C31 H43 N O4

Absolute stereochemistry.

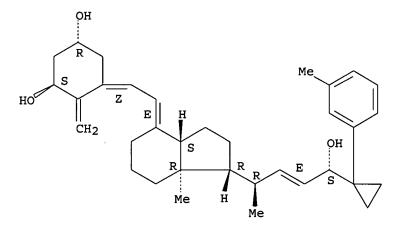
Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(3-methylphenyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)
MF C34 H46 O3

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-butyl-2-thienyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)
MF C35 H50 O3 S

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-ethyl-2-oxazolyl)cyclopropyl]-, $(1\alpha,3\beta,5Z,7E,22E,24R)$ - (9CI)

MF C32 H45 N O4

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-butyl-2-oxazolyl)cyclopropyl]-, tribenzoate (ester), (1α,3β,5Z,7E,22E,2 4S)- (9CI)
MF C55 H61 N O7

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-pentyl-2-thiazolyl)cyclopropyl]-, (1α,3β,5Z,7E,20S,22E,24R)- (9CI)

Absolute stereochemistry.

Double bond geometry as shown.

C35 H51 N O3 S

MF

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(6-ethyl-2-pyridinyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C34 H47 N O3

Absolute stereochemistry.

Double bond geometry as shown.

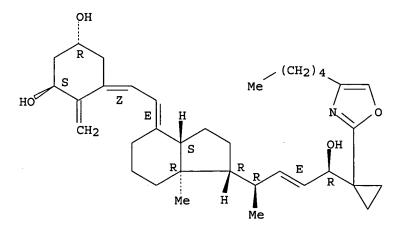
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-pentyl-2-oxazolyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C35 H51 N O4

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-propyl-2-thiazolyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C33 H47 N O3 S

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(3-propyl-1,2,4-oxadiazol-5-yl)cyclopropyl]-, tri-4-pyridinecarboxylate (ester), (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C50 H55 N5 O7

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN

IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 20-methyl-24-[1-(5-methyl-2-thiazolyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24S)- (9CI)

MF C32 H45 N O3 S

Absolute stereochemistry. Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-butyl-2-pyridinyl)cyclopropyl]-, $(1\alpha,3\beta,5Z,7E,22E,24S)$ - (9CI) MF C36 H51 N O3

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(4-methyl-2-thienyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C32 H44 O3 S

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L41 370 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN 9,10-Secochola-5,7,10(19),22-tetraene-1,3,24-triol, 24-[1-(5-butyl-2-thiazolyl)cyclopropyl]-, (1α,3β,5Z,7E,22E,24R)- (9CI)
MF C34 H49 N O3 S

Absolute stereochemistry.

Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> d his

(FILE 'HOME' ENTERED AT 06:22:53 ON 17 AUG 2005) SET COST OFF

```
FILE 'HCAPLUS' ENTERED AT 06:23:03 ON 17 AUG 2005
L1
              1 S (US20050080058 OR US6600058 OR US6613920 OR US6642218 OR US20
                E STEINMEYER A/AU
L2
             50 S E3, E4
                E KIRSCH G/AU
L3
            152 S E3-E5, E11
                E NEEF G/AU
            186 S E3, E5-E7
L4
                E SCHWARZ K/AU
L5
            443 S E3-E14, E42, E43
                E THIEROFF E/AU
L6
             27 S E4-E7
                E ECKERDT/AU
                E EKERDT/AU
L7
              6 S E9
                E WIESINGER H/AU
L8
             64 S E3-E6, E10
                E HABEREY M/AU
L9
             54 S E3,E4
                E FAHNRICH M/AU
L10
              7 S E3,E4
                E FAEHNRICH M/AU
L11
              7 S E3, E4
L12
          13977 S SCHERING?/PA,CS
                SEL RN L1
     FILE 'REGISTRY' ENTERED AT 06:27:16 ON 17 AUG 2005
L13
            436 S E1-E436
                ACT QAZI962/A
L14
                STR
```

```
8455 SEA FILE=REGISTRY SSS FUL L14
L15
               ------
L16
                STR L14
L17
           8760 S L16 FUL
                SAV L17 QAZI658/A
L18
                STR L16
L19
             50 S L18 SAM SUB=L17
L20
           2256 S L18 FUL SUB=L17
                SAV L20 QAZI648A/A
                DEL QAZI648A/A
                SAV L20 QAZI658A/A
L21
                STR L18
L22
              8 S L21 SAM SUB=L20
L23
            370 S L21 FUL SUB=L20
                SAV L23 QAZI658B/A
L24
                STR L21
L25
              8 S L24 SAM SUB=L20
L26
            370 S L24 FUL SUB=L20
                SAV L26 QAZI658C/A
L27
            328 S L13 AND L20
L28
             10 S L27 NOT L26
L29
              2 S L28 AND C3/ES
L30
            372 S L23, L26, L29
                SAV L30 QAZI659D/A
     FILE 'HCAOLD' ENTERED AT 07:24:16 ON 17 AUG 2005
L31
              0 S L30
     FILE 'HCAPLUS' ENTERED AT 07:24:20 ON 17 AUG 2005
L32
              9 S L30
L33
              7 S L32 AND L1-L12
L34
              3 S L32 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L35
              3 S L33 AND L34
     FILE 'USPATFULL' ENTERED AT 07:25:47 ON 17 AUG 2005
L36
              8 S L30
L37
              5 S L36 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L38
              5 S L36 AND SCHERING?/PA
L39
              7 S L36 AND (STEINMEYER ? OR KIRSCH ? OR NEEF ? OR SCHWARZ ? OR T
L40
              5 S L37 AND L38, L39
     FILE 'REGISTRY' ENTERED AT 07:33:06 ON 17 AUG 2005
     FILE 'HCAPLUS' ENTERED AT 07:33:23 ON 17 AUG 2005
     FILE 'USPATFULL' ENTERED AT 07:33:54 ON 17 AUG 2005
     FILE 'REGISTRY' ENTERED AT 07:34:13 ON 17 AUG 2005
L41
            370 S L30 AND NR>=5
L42
              2 S L30 NOT L41
     FILE 'HCAPLUS' ENTERED AT 07:36:14 ON 17 AUG 2005
L43
              7 S L41
L44
              5 S L1-L12 AND L43
L45
              1 S L43 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L46
              1 S L44 AND L45
L47
              6 S L43 NOT L46
     FILE 'USPATFULL' ENTERED AT 07:37:55 ON 17 AUG 2005
L48
              7 S L41
```

L49	4 S L48 AND (PY<=1996 OR PRY<=1996 OR AY<=1996)
L50	3 S L49 AND SCHERING?/PA
L51	4 S L49 AND (STEINMEYER ? OR KIRSCH ? OR NEEF ? OR SCHWARZ ? OR T
T ₁ 52	4 S 1.49-1.51

FILE 'REGISTRY' ENTERED AT 07:39:24 ON 17 AUG 2005

FILE 'USPATFULL' ENTERED AT 07:39:42 ON 17 AUG 2005

FILE 'HCAPLUS' ENTERED AT 07:39:56 ON 17 AUG 2005

FILE 'REGISTRY' ENTERED AT 07:40:42 ON 17 AUG 2005

=>